

Trade and Industrial Education
Course: Engineering Design/CAD
Course Code # 5788
2 Credits

School Year _____

Term: ___ Fall ___ Spring

Student:	Grade:
Teacher:	School:
Number of Competencies in Course: 17	
Number of Competencies Mastered:	
Percent of Competencies Mastered:	

STANDARD 1.0: Students will demonstrate proficiency in creating manual two-dimensional scale drawings.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1	Create accurate and complete manual scale drawings of two-dimensional objects and two-dimensional plans.			
1.2	Apply drawing dimensioning rules using basic measurement systems.			

STANDARD 2.0: Students will demonstrate proficiency in creating manual three-dimensional scale drawings.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1	Create complete orthographic projections of simple three-dimensional objects.			
2.2	Create complete orthographic projections of complex three-dimensional objects.			

STANDARD 3.0: Students will use the basic functions of a CAD software program to draw two-and three-dimensional objects.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1	Perform basic CAD software operations.			
3.2	Use standard templates and create new templates for CAD drawing.			
3.3	Use a CAD program to draw and dimension simple two-dimensional objects.			
3.4	Use a CAD program to draw and dimension orthographic projections of three-dimensional objects.			

STANDARD 4.0: Students will demonstrate proficiency in creating sectional and pictorial drawings using a CAD software program.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1	Create sectional views of moderately complex solid objects.			
4.2	Create pictorial drawings of a group of objects using a CAD program.			

STANDARD 5.0: Students will use CAD software skills to produce complete sets of project drawings.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1	Draw individual components of a project using a CAD program.			
5.2	Make assembly drawings including exploded assemblies, for a project, using a CAD program.			
5.3	Create a bill of materials for a project using a CAD program.			

STANDARD 6.0: Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Exhibit positive leadership skills.			
6.2	Participate in SkillsUSA-VICA as an integral part of classroom instruction.			
6.3	Assess situations and apply problem-solving and decision-making skills to particular client relations in the community, and workplace.			
6.4	Demonstrate the ability to work cooperatively with others in a professional setting.			

Additional Comments _____